AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 9 of the substitute specification with the following amended paragraph:

When transmitting data via memory-enabled channels, data parts separated over time are superposed. The resulting intersymbol interference of the data can be eliminated if the pulse response of the transmission channel is known. So-called channel estimators are used to determine the pulse response. They use information regarding the transmitted signal or the form of this signal to derive channel coefficients from the received signal. The most widely used channel estimators are based on a matched filter for a completely known reference signal **r** having optimum autocorrelation properties, i.e., $\mathbf{r^*r} \propto \delta$, as seen, for example, in K.D. Kammeyer's "Nachrichtenübertragung," 2nd Ed., Information Technology Series, Teubner, Stuttgart, 1996. Non-optimum autocorrelation properties can be linearly corrected, yet <u>inherent</u> additive noise of the <u>to be estimated</u> transmission channel ~~to be estimated, as is inherent~~, e.g., in CDMA systems ~~(CDMA = code division multiple access)~~, generally results in <u>transmission channel</u> coefficient estimations that are higher than the actual values. It is known to partially correct these inaccurate <u>transmission channel</u> coefficient estimations using non-linear reworking. Thus, such a method, called the POCS method or POCS algorithm (POCS = projection onto convex sets), is known, for example, from the publication by Z. Kostic, M.I. Sezan and E.L. Titlebaum: "Estimation of the Parameters of a Multipath Channel Using Set-Theoretic Deconvolution", IEEE Trans. Comm., Vol. 40 (1992), 1006 - 1011. In this connection, reference is also made to the known MMSE algorithm (MMSE = minimum mean square error), which is described, e.g., in the K.D. Kammeyer monograph "Nachrichtenübertragung" cited above. <u>However, known techniques for correcting the pulse response estimation fail to take into consideration any additive interference estimations for the transmission channel.</u>